

Please replace the table at page 48, lines 7 - 12, with the following rewritten table:

TABLE DOME TEMPERATURE EFFECT

B4

| Dome Temperature | Impedance<br>MagDPhase | XPS   | XRD   | EDS<br>Pt/Cl Ratio | Deposition<br>Thickness |
|------------------|------------------------|---|---|--------------------|-------------------------|
| 80°C             | 1800 ohm<br>D-420      | PtCl <sub>2</sub>                           | Pt, PtCl <sub>2</sub> ,<br>PtO <sub>2</sub> | 0.8                | Thick                   |
| 150°C            | 480 ohm<br>D-90        | Pt, PtCl <sub>2</sub> ,<br>PtO <sub>2</sub> | Pt, PtCl <sub>4</sub> ,<br>PtO <sub>2</sub> | 0.9                | Very Thin               |

IN THE CLAIMS:

Please cancel Claims 2, 7, and 18 without prejudice. Please amend the claims as follows.

- B5
1. A method of processing a metal layer on a substrate comprising:
- disposing a substrate in a chamber having a chamber wall which includes a dielectric member which bears pressure loading, wherein an inductive power source is present exterior to said dielectric member of said chamber wall;
  - introducing a processing gas into said chamber;
  - passing processing power through at least a portion of said dielectric member and into said chamber to process a metal layer on said substrate in a plasma generated from said processing gas; and
  - heating a surface of said dielectric member to a temperature which decreases the deposition of power-blocking materials, which are byproducts of said metal layer processing, on a surface of said dielectric member relative to the amount of said power-blocking materials which would accumulate without said heating.

2/3. The method of Claim 1 wherein said power-blocking materials include materials having a conductivity which increases as the thickness of the deposit decreases.

3/4. The method of Claim 1 wherein said power-blocking materials include materials having a conductivity which increases as the temperature of the dielectric member increases.

4/5. The method of Claim 1 wherein said power-blocking materials comprise electrically conductive elements.

6. The method of Claim 2 wherein said power-blocking materials comprise electrically conductive elements.

5/8. The method of Claim 1 wherein said temperature is greater than about 150°C.

6/9. The method of Claim 1 wherein said temperature is greater than about 225°C.

7/10. The method of Claim 1 wherein said power-blocking materials comprise an element selected from the group consisting of platinum, copper, aluminum, titanium, ruthenium, iridium and mixtures thereof.

8/11. The method of Claim 1 wherein said substrate including said metal layer comprises a semiconductor wafer.

9/12. The method of Claim 1 wherein said dielectric member includes a generally dome-shaped structure.

10/13. The method of Claim 12 wherein said processing power is selected from the group consisting of RF power, microwave power, and combinations thereof.

11/14. The method of Claim 1 wherein said chamber includes an inductively coupled RF power source which is used to generate a plasma of the processing gas.

12/15. The method of Claim 1 wherein said processing of said metal layer on said substrate is selected from the group consisting of etching said metal layer and depositing said metal layer.

13/16. The method of Claim 2 wherein said materials which block processing power transmission comprise platinum, and said processing of said metal layer comprises etching a platinum layer.

14/17. A method for decreasing the amount of deposition of semiconductor processing byproduct materials which affect the transmission of processing power through a pressure loaded chamber dielectric member, comprising:

a) providing a chamber having a chamber wall which includes a pressure loaded dielectric member, wherein said chamber contains at least one substrate and a plasma processing gas for processing said at least one substrate;

b) transmitting processing power through said pressure loaded dielectric member and into said processing gas to produce a plasma for processing said substrate; and

c) heating a surface of said dielectric member to a temperature greater than about 150°C to decrease the amount of deposition on the surface of said pressure loaded dielectric member of said semiconductor processing byproduct materials relative to the amount of said semiconductor processing byproduct materials which would accumulate without said heating.

15 ~~18~~. The method of Claim ~~17~~ wherein said processing power is RF power.

16 ~~20~~. The method of Claim ~~17~~ wherein said processing power is microwave power.

17 ~~21~~. The method of Claim ~~17~~ wherein said semiconductor processing byproduct materials comprise an element selected from the group consisting of platinum, copper, aluminum, titanium, ruthenium, iridium and mixtures thereof.

18 ~~22~~. The method of Claim ~~21~~ wherein said deposit exhibits a conductivity which increases as the thickness of the deposit decreases when the temperature of the surface of said dielectric member increases.

19 ~~23~~. The method of Claim ~~17~~ wherein said processing of said substrate comprises processing a metal layer on the substrate.

20 ~~24~~. The method of Claim ~~23~~ wherein said substrate comprises a semiconductor wafer.

21 ~~25~~. The method of Claim ~~17~~ wherein said pressure loaded dielectric member includes a generally dome-shaped structure.

22 ~~26~~. The method of Claim ~~25~~ wherein said processing power is selected from the group consisting of RF power, microwave power, and combinations thereof.

23 ~~27~~. The method of Claim ~~17~~ wherein said chamber includes an inductively coupled RF power source which is used to generate a plasma of said processing gas.

24/28. The method of Claim 23 wherein said processing of said metal layer is selected from the group consisting of etching said metal layer and depositing said metal layer.

25/29. The method of Claim 23 wherein said metal layer comprises platinum, and said processing of said metal layer comprises etching.

26/30. A method of etching a platinum layer disposed on a substrate comprising:

a) disposing a substrate in a chamber having a chamber wall which includes a pressure loaded dielectric member and which contains a processing gas; and

b) heating an interior surface of said pressure loaded dielectric member to a temperature to decrease the amount of platinum by-products deposited on the interior surface of said pressure loaded dielectric member during plasma etching of said platinum layer relative to the amount of said platinum by-products which would accumulate without said heating.

27/31. The method of Claim 30 wherein generation of said plasma comprises transmitting processing power through said dielectric member and into said plasma processing gas.

28/32. The method of Claim 30 wherein said temperature is greater than about 150°C.

29/33. The method of Claim 31 wherein said temperature is greater than about 150°C.

30/34. The method of Claim 30 wherein said platinum by-products are electrically conductive.

31/35. The method of Claim 33 wherein said platinum by-products are electrically conductive.

32/36. The method of Claim 36 wherein said platinum by-products are capable of forming a deposit having a conductivity which increases as the thickness of the deposit decreases.

33/ 31. The method of Claim 30 wherein said platinum by-products are capable of forming a deposit having a conductivity which increases as the thickness of the deposit decreases when the temperature of the interior surface of the dielectric member increases.

38. The method of Claim 30 wherein said processing gas used to generate said plasma is selected from the group consisting of argon, oxygen, chlorine and mixtures thereof.

[illegible]